MASS. IT1.2:M38/7

UMASS/AMHERST
312066 0282 4335 7

894/443
UMASS

Massachusetts International Biotechnology Directory

GOVERNMENT DOCUMENTS COLLECTION
SEP 30 1990
University of Massachusetts Depository Copy

Massachusetts International Biotechnology Directory

The Massachusetts International Biotechnology Directory (Second Edition) is the result of careful preparation and industry research. However, due to the scope of the Directory, the Massachusetts International Trade Council, Inc. cannot assume liability for the correctness of the listings or for the information on which the listings are based. The Council does not assume and therefore disclaims any liability to any party for any loss or damage caused by errors or omissions in this directory, whether such errors result from negligence, accident or any other cause.

© Copyright August 1989
Massachusetts International Trade Council, Inc.
All Rights Reserved

Alphabetical Listing of Massachusetts Biotechnology Firms

A/G TECHNOLOGY CORPORATION

Address:	34 Wexford Street
	Needham, MA 02194
Phone:	(617) 449-5774
Telex:	315138
Contact:	Mr. Myles Kleper, Vice President
Established:	1981
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry
Purification and Separation Devices and Equipment

PRODUCTS/SERVICES/RESEARCH:
Ultrafiltration and microfiltration hollow fiber membrane cartridges. Full range of pore sizes and cartridge sizes. Steam-in-place process-scale ultrafiltration and microfiltration. Oxygen enriched air generation systems for sparging higher oxygen concentrations into fermentors to increase efficiency.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

ADVANCED MAGNETICS, INC.

Address:	61 Mooney Street
	Cambridge, MA 02138
Phone:	(617) 497-2070
Fax:	(617) 497-6927
Telex:	9102401608 ADMG CAM
Contact:	Mr. Jerome Goldstein, President
Established:	1982
Employees:	16
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Suppliers to the Biotechnology Industry
Products for medical research and basic research in the life sciences

PRODUCTS/SERVICES/RESEARCH:
Radioimmunoassay kits for prostanglandins, leukotrienes, HETEs and cyclic nucleotides. Magnetic affinity separations solid phases for radio-immunoassays, DNA probe assays, cell sorting and other applications. Custom work for clinical immunoassays and magnetic separations.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

ALKERMES, INC.

Address:	26 Landsdown Street
	Cambridge, MA 02139
Phone:	(617) 494-0171
Fax:	(617) 494-9263
Contact:	Stuart P. Davidson, President
Established:	1988
Employees:	14
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care-Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Research and development technologies for carrying CNS therapeutics across the blood-brain barrier (BBB). The company is working on improving current drugs in the areas of cancer, neurodegenerative disorders, and AIDS dementia. Currently investigating delivery strategies using endogenous protein and CNS homing agents.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Joint-venture (research)

AMERICAN BIOTECHNOLOGIES

Address:	359 Allston Street
	Cambridge, MA 02139
Phone:	(617) 547-5535
	(617) 876-1268
Contact:	Simon Mckenzie, President
Established:	1987
Employees:	18
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Provider of intermediate components and custom services to the biotechnology industry, including: plasnio production, oligonucleotide synthesis, bacteriophage production, vector construction, subcloning, diagnostic screening (viral), monoclonal antibody screening and production.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale of finished product
Sale through agents/distributors
License of technology

AMICON DIVISION (W.R. GRACE & CO.)

Address:	24 Cherry Hill Drive
	Danvers, MA 01923
Phone:	(617) 777-3622
Fax:	(617) 777-6204
Telex:	275192
Contact:	Mr. Peter Rigopulos, President
Established:	1963
Employees:	300
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry
Suppliers to the Pharmaceutical Industry

PRODUCTS/SERVICES/RESEARCH:
Ultrafiltration membrane devices and systems for separation of molecular and particulate components; chromatographic media, columns and systems for refined purfication procedures; hollow fiber cell culture apparatus and serum-free media; blood filtration devices for use in acute kidney failure and open heart surgery. Applications range from laboratory research to large industrial installations. Research in advance techniques for purification and concentration of suspended and dissolved materials in liquids.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationship: Division of W. R. Grace & Co.

ANGENICS, INC.

Address:	100 Inman Street
	Cambridge, MA 02139
Phone:	(617) 876-6468
Fax:	(617) 876-7965
Telex:	4974826
Contact:	Mr. Andre de Bruin, President
Established:	1981
Employees:	65
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
BEST TEST (tm): test for bovine estrogen levels, SPOT TEST (tm): test for antibiotics in milk
Research in latex agglutination assays & delivery systems for a wide range of human and animal diagnostics

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Alfa-Laval (Sweden), license for bovine progesterone test
Roche Diagnostica (NJ), development of drugs of abuse assay

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct Sale, Sale through agents/distributors
License of technology, Joint-venture (research)
Joint-venture (marketing)

APPLIED BIOTECHNOLOGY

Address:	80 Rogers Street
	Cambridge, MA 02142
Phone:	(617) 492-7289
Fax:	(617) 492-8438
Contact:	Mr. Steven Peltzman, President
Established:	1983
Employees:	44
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics
Food Processing
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
Applied biotechnology is an R&D stage company that is developing vaccines and ocogene-based cancer products through advanced biology and recombinant technologies. The company's principal vaccine research focuses on recombinant live virus systems and products for the preservation of animal and human infectious diseases. ABT is currently developing vaccines against animal diseases such as poultry infections and swine pseudorabies, and human vaccines for leporsy, tuberculosis and AIDS.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:
Mitsubishi (Japan) will market certain ABT products in the Far East

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sales through agents/distributors, License of Technology
Joint-venture (research), Joint-venture (marketing)
Foreign operation

APV GAULIN INC.

Address:	44 Garden Street
	Everett, MA 02149
Phone:	(617) 387-9300
Fax:	(617) 387-4431
Telex:	174275
Contact:	Mr. Robert Cooper, President
Established:	1909
Employees:	150
Ownership:	UK Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Cell disruption homogenizers. Heat exchangers.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationship
Division of APV Consolidated (London)

ASPEN TECHNOLOGY, INC.

Address:	251 Vassar Street
	Cambridge, MA 02139
Phone:	(617) 497-9010
Fax:	(617) 497-7806
Telex:	948-038
Contact:	Mr. Joseph F. Boston, President
Established:	1981
Employees:	60
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Software to simulate bioprocessing operations such as sterilization, fermentation, centrifugation, cell disruption, membrane separations, chromatography, and many others. Aspen Tech applies this proprietary technology to solve customer problems in bioprocess development, scale-up and optimization.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology

BETAGEN CORPORATION

Address:	100 Beaver Street
	Waltham, MA 02154
Phone:	(617) 899-3400
Fax:	(617) 899-7063
Contact:	Robert J. DePasqua, President
Established:	1985
Employees:	35
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Development, manufacturing and marketing of automated systems for genetic analysis. Betagen presently markets a direct two-dimensional, radiation imaging system for DNA research called the Betascope 603 Blot Analyzer

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

BIOGEN N.V.

Address:	14 Cambridge Center
	Cambridge, MA 02142
Phone:	(617) 864-8900
Fax:	(617)491-1228
Telex:	7103201178
Contact:	Mr. James Vincent, CEO
Established:	1978
Employees:	250
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
Research on products for the AIDS therapeutics, anti-inflamation and selected cancer markets.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology

BIOMEDICAL TECHNOLOGIES, INC.

Address:	378 Page Street
	Stoughton, MA 02072
Phone:	(617) 344-9942
Fax:	(617) 341-1145
Telex:	9102403255
Contact:	Mr. Maurice P. Lamarque, President
Established:	1981
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Specialty Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
BTI manufactures a variety of products including cell culture products (growth factors and attachment factors), radioimmunoassay kits and components, enzyme immunoassay kits, immunohistochemical reagents and kits, polyclonal and monoclonal antibodies, proteins, and other labeling reagents. Radioactive products are also produced.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct Sale
Sale through agents/distributors
License of technology
Joint-venture (research)
Joint-venture (marketing)
Foreign operation

BIOPURE CORPORATION

Address:	68 Harrison Avenue
	Boston, MA 02111
Phone:	(617) 350-7800
Fax:	(617) 350-6614
Contact:	Mr. Brian McGuinn, President
Established:	1984
Employees:	34
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Purfied oxygen transport medium for in vitro use in laboratory research. Used in conjuction with liposome encapsulation, blood substitute development, polymerization, coacervation, tissue perfusion and extracorporeal organ studies. Research in the development of highly purified hemoglobin solution for use in oxygen transport in humans, the development of enzymatic reactors for production of antibiotic percursors, and the development of biochemical separation technologies (HPLC, membranes, enzyme reactors) for the large scale economic production of biologically active products.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:
B. Braun Melsungen (Germany)

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture (marketing)

BIOTECHNICA INTERNATIONAL, INC.

Address:	85 Bolton Street
	Cambridge, MA 02140
Phone:	(617) 864-0040
Fax:	(617) 491-0813
Telex:	705219
Contact:	Mr. Norman Jacobs, President
Established:	1981
Employees:	200
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Agriculture
Specialty Chemicals

PRODUCTS/SERVICES/RESEARCH:
DMDx test for periodontal disease. Silage inoculant ("Biotechnica Agriculture" brand). Conventional seeds through seed company subsidiaries, research enzymes, research in improved genetic engineering technologies for industrial applications (production of proteins, amino acids), genetic engineering of plants and agricultural microorganisms, genetic engineering of industrial yeast and diagnostic methods.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Seagram Co. Ltd. (Canada), RJR/Nabisco (USA)
F. Hoffmann-LaRoche & Co. Ltd. (Switzerland)-joint venture

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology, Joint-venture (research)

BIOTECHNOLOGY DEVELOPMENT CORPORATION

Address:	44 Mechanic Street
	Newton, MA 02164
Phone:	(617) 965-7255
Fax:	(617) 965-6952
Telex:	755709
Contact:	Mr. Irwin Gruverman, President
Established:	1983
Employees:	30
Ownership:	Public

MAIN ACTIVITIES:
Pharmaceuticals, Cosmetics, High Tech Process Equipment.
Surface Acoustic Sensor Devices.

PRODUCTS/SERVICES/RESEARCH:

Process equipment: Research through production models, service lab, contract research, detection of RXNS at surfaces, potential medical diagnostics, research in drug delivery systems compatible with biotechnology produced therapeutics.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Medi Control Corp. (Mass.); Microfluidics Corp. (Mass.); Integrated Chemical Sensors (Mass.)

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sales through agents/distributors, License of technology
Joint-venture (research), Joint-venture (marketing)
Foreign operation

BOSTON BIOMEDICAL, INC.

Address:	375 West Street
	West Bridgewater, MA 02379
Phone:	(508) 580-1900
Fax:	(508) 580-2202
Telex:	5106012210
Contact:	Richard T. Schumacher, President
Established:	1988
Employees:	18
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care-Diagnostics
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Development laboratory and contract manufacturer for the clincial diagnostics industry, specialzing in the processing of blood based components for infectious disease diagnostic test systems. Primary focus on HIV (AIDS), HTLV 1 (adult T-cell leukemia) and viral hepatitis. Also offers their facility as a site for clinical trials and performance evaluations to in-vitro diagnostic test kit manufacturers during test system development or licensing applications.

CAMBRIDGE ANALYTICAL ASSOCIATES, INC.

Address:	1106 Commonwealth Ave
	Boston, MA 02215
Phone:	(617) 232-2207
	(617) 731-1358
Contact:	Martin Wolf, President
Established:	1979
Employees:	100
Ownership:	Private

MAIN ACTIVITITES:
Environmental Applications

PRODUCTS/SERVICES/RESEARCH:
Applications for the destruction of chemical wastes in soil and groundwater using naturally occurring micro-organisms. Provide chemical analysis services and hazardous waste remediation services.

CAMBRIDGE BIOSCIENCE

Address:	365 Plantation Street
	Worcester, MA 01605
Phone:	(508) 797-5777
Fax:	(508) 797-4014
Telex:	3725782 Camb Bio Wor
Contact:	Mr. Gerald F. Buck, Chairman and CEO
Established:	1981
Employees:	105
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics, Human Health Care - Therapeutics, Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
AIDS Diagnostics, ClinEase-FeLV using monoclonal antibodies for detection of FeLV antigen, FeLV vaccine and non-toxic vaccine adjuvant, rotaclone(R) enzyme immunoassay screening test and Adneclone(R) immunofluorescence assay (IFA) confirmatory test for detection of adenovirus group antigens. Adenoclone(R)-Type 40/41 enzyme immunoassay for enteric adenovirus antigen. Research includes use of genetic engineering, immunology and protein/peptide chemistry. Focus on infectious diseases in humans and animals, especially virology and emphasis in retrovirology.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Baxter Healthcare Corp. (USA), exclusive distribution agreement for RECOMBIGEN(R) - HIV EIA AND LA; Syntex Corp. (USA), development and distribution agreement; American Home Products (USA), Boots-Celltech Diagnostics (UK),
Toray Fuji Bionics (Japan), and Norden Laboratories (USA) - distribtion agreements.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale, Sale through agents/distributors, Joint-venture (research), License of technology

CAMBRIDGE MEDICAL TECHNOLOGY

Address:	575 Middlesex Turnpike
	Billerica, MA 01865
Phone:	(508) 667-2161
Fax:	(508) 667-8651
Telex:	710347184
Contact:	Mr. Joseph Carroll, President
Established:	1960
Employees:	55
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
CMT offers a broad range of immuno diagnostic kits with clinical and veterinary applications. These kits are used to diagnose and monitor glucose and calcium metabolism disorders, thyroid and fertility function, and other endocrine functions. CMT also offers over 400 non-isotopic reagents including monoclonal and polyclonal antibodies, antigens, radioliganos, and other biological raw materials. Research efforts are concentrated in the areas of animal and human fertility, drug detection, calcium metabolism and thyroid function.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale
Sale through agents/distributors
Joint-venture (research)
Joint-venture (marketing)

CAMBRIDGE NEUROSCIENCE RESEARCH, INC.

Address:	One Kendall Square, Bldg. 700
	Cambridge, MA 01239
Phone:	(617) 225-0600
Fax:	(617) 225-2741
Contact:	Mr. Alan Dalby, President
Established:	1986
Employees:	33
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Development of patented products for the diagnosis, treatment and prevention of neurological and psychiatric disorders. Major programs are projects to develop sigma receptor antagonists as anti-psychotic drugs and to develop neuroprotective drugs based on excitatory amino acid antagonists. Neuroprotective agents have potential applications in a variety of disorders, including stroke, epilepsy, Huntingtons disease, and Alzheimers disease.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture (research)
Joint-venture (marketing)

CAMBRIDGE RESEARCH LABORATORY

Address:	195 Albany Street
	Cambridge, MA 02139
Phone:	(617) 491-2300
Fax:	(617) 868-6352
Contact:	Mr. Louis A. Kamentsky, Director
Established:	1981
Employees:	52
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics

PRODUCTS/SERVICES/RESEARCH:
Diagnostic reagents and kits. Research in biosensors, diagnostic instruments, and diagnostic reagents using antibodies.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Johnson & Johnson (New Jersey) - Parent company

CAMBRIDGE TECHNOLOGY, INC.

Address:	23 Elm Street
	Watertown, MA 02172
Phone:	(617) 923-1181
Contact:	Mr. Edward Grenda, President
Established:	1979
Employees:	15
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturer of cell harvesting instruments for laboratory automation.

CELLCOR THERAPIES, INC.

Address:	1256 Soldiers Field Road
	Boston, MA 02135
Phone:	(617) 782-2204
Fax:	(617) 782-2132
Contact:	Gary Cashon, President
Established:	1987
Employees:	28
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care-Diagnostics

PRODUCTS/SERVICES/RESEARCH:
Currently conducting clinical research trials in the use of in-vitro activated lymphocytes for the treatment of Renal Cell Carcinoma. Research is being conducted at five sites around the country. Research in antigen specific cancer therapy as well as utilizing their lymphocyte immunization process for transplantation.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IN INTERESTED IN PURSUING:
License of technology
Joint-venture (research)

CHARLES RIVER BIOTECHNICAL SERVICES

Address:	251 Ballardvale Street
	Wilmington, MA 01887
Phone:	(508) 657-6500
Contact:	Mr. James C. Foster, President
Established:	1982
Employees:	100
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Contract production of monoclonal antibodies in mouse fluid and utilizing CRBSs patented opticell cell culture technology. Also engaged in the sale of Opticell systems to companies for in-house cell culture production.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Division of Charles River Laboratory, a subsidiary of Bausch & Lomb

CHEMDESIGN CORPORATION

Address:	99 Development Road
	Fitchburg, MA 01420
Phone:	(508) 345-9999
Fax:	(508) 342-9769
Telex:	516328
Contact:	Mr. Richard E. Brooks, President
Established:	1983
Employees:	50
Ownership:	Private

MAIN ACTIVITIES:
Specialty Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Protected amino acids. Large, imtermediate and small-scale production of protected amino acids (custom basis). Separation technology.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale
Sale through agents/distributors
License of technology
Joint venture (research)
Foreign operation

CHEMGENES CORPORATION

Address:	925 Webster Street
	Needham, MA 02192
Phone:	(617) 449-5051
Contact:	Dr. Suresh Srivastava, President
Established:	1981
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturer of DNA chemical intermediates and biomedical diagonstic DNA.

COLLABORATIVE RESEARCH, INC.

Address:	2 Oak Park
	Bedford, MA 01730
Phone:	(617) 275-0004
Fax:	(617) 275-0043
Telex:	7103267601
Contact:	Dr. Orrie Friedman, President
Established:	1961
Employees:	130
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics
Specialty Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
DNA Diagnostic Services: A fully-licensed reference laboratory that performs a wide range of diagnostic and monitoring services on a referral basis, using DNA probe technology. Biomedical Research Products: Develop and market a wide range of biochemical research products for cell and molecular biology. Research: Development of diagnostic tests for genetic diseases based on DNA probe technology, characterization and insertion of mamalian genes into micro-organisms, production and purification of natural and recombinant proteins.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:Sandoz (Switzerland) for development and marketing of prourokinase.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale, Sale through agents/distributors, Joint-venture (research), Joint-venture (marketing)

COVALENT ASSOCIATES, INC.

Address:	52 Dragon Court
	Woburn, MA 01801
Phone:	(617) 938-1140
Contact:	Dr. Victor Koch, President
Established:	1981
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Conducts research and development on novel biosensor concepts. Special emphasis on exploring surface-selective chemically modified electrodes for a variety of applications in fermentation processes.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture (research)

CREATIVE BIOMOLECULES

Address:	35 South Street
	Hopkinton, MA 01748
Phone:	(508) 435-9001
Contact:	Dr. Charles Cohen, President
Established:	1981
Employees:	21
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Technology for the commerical-scale production of protein-based products. Agricultural, pharmaceutical, and speciality chemical companies use their integrated protein designs with optimized production and purification processes.

CRYSTAL DIAGNOSTICS, INC.

Address:	30 Commerce Way
	Woburn, MA 01801
Phone:	(617) 933-4114
Fax:	(617) 935-2865
Contact:	John G. Schulte, President
Established:	1982
Employes:	35
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care-Diagnostics
Environmental Applications

PRODUCTS/SERVICES/RESEARCH:
Devlopment of disposable diagnostic devices capable of quantitatively measuring substances in blood and urine. Currently marketing a line of disposable personal exposure monitors which detect hazardous gases in the workplace.

FORMS OF INTERENATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors
License of technology
Joint venture (research)
Joint venture (marketing)

DAMON BIOTECH, INC

Address:	119 Fourth Avenue
	Needham, MA 02194
Phone:	(617) 449-6002
Fax:	(617) 449-4010
Telex:	200228 DDAM UR
Contact:	Mr. Joseph Lovett, Sr. Vice President
Established:	1981
Employees:	100
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics
Animal Health Care
Specialty Chemicals

PRODUCTS/SERVICES/RESEARCH:
Contract production of monoclonal antibodies for use in human health care industry. Research: production of chimeric antibodies, recombinant antibodies and controlled release technology for hormones and vaccines in animal health care.

EXISTING BUSINESS RELATIONSHIPS:
Development of tPA for Yamanouchi Pharmaceutical (Japan) and SmithKline Beckman (USA, Europe).

DAN KAR CORPORATION

Address:	P.O. Box 279
	Reading, MA 01867
Phone:	(671) 944-1550
Contact:	Mr. Terry Hahan, President
Established:	1976
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturer of protein and DNA sequencer equipment.

ENDOGEN, INC

Address:	451 D Street
	Boston, MA 02210
Phone:	(617) 439-3250
Contact:	Mr. Phillip Servidori, Founder
Established:	1983
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics
Specialty Chemicals
Suppliers to the Biotechnology Industry
Human Health Care-In Vitro Diagnostics
Protein Purification

PRODUCTS/SERVICES/RESEARCH:
Diagnostic research ELISAs and research biological reagents. Antibody production. Research in the fields of human therapeutics, diagnostic ELISAs, research biological reagents, cancer, transplant rejection, AIDS, immunology, and autoimmunity.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Funakoshi Pharmaceuticals (Japan); Mochida Pharmaceutical (Japan) Genzyme (USA)

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors
License of technology and products
Joint-venture (research)
Joint-venture (marketing)

ENZYME CENTER, INC.

Address:	36 Franklin Street
	Malden, MA 02148
Phone:	(617) 322-4885
Telex:	940195 TNEMC
Contact:	Mr. Stanley Charm, President
Employees:	30
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Large-scale fermentation, separation and purification of enzymes and biological material.

ENZYTECH, INC.

Address:	763 D Concord Avenue
	Cambridge, MA 02138
Phone:	(617) 661-0940
Fax:	(617) 864-5824
Contact:	Mr. Mark Skaletesky, CEO
Established:	1987
Ownership:	Private

MAIN ACTIVITIES:
Food Processing
Specialty Chemicals
Delivery Systems for Protein Drugs

PRODUCTS/SERVICES/RESEARCH:
Stablization, modification, use and delivery of catalytically and therapeutically active proteins and polypeptides. In the pharmaceutical area, the focus is on stabilizing therapeutic proteins and on developing delivery systems capable of administering polypeptide drugs in a controlled manner over prolonged periods of time. Enzytechs other core area is the development of natural, functional food ingredients by exploiting the use of enzymes in non-traditional environments such as food grade solvents, gaseous phase and supercritical fluids.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture (research)
Joint-venture (marketing)

FILTRON TECHNOLOGY CORPORATION

Address:	500 Main Street
	P.O. Box 119
	Clinton, MA 01510
Phone:	(508) 368-8582
Fax:	(508) 368-7734
Contact:	Martin Hirsch, President
Established:	1984
Employees:	20
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Ultrafiltration membranes and systems for the laboratory, biotechnology, pharmaceutical and industrial markets.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sales through agents/distributors

GENEMSCO CORPORATION

Address:	Genemsco Beach
	Kingston, MA 02364
Phone:	(617) 585-3894
Contact:	Lawrence Lee Slot, President
Established:	1983
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Environmental Applications
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Supplies the educational community with cell cloning and gene splicing modules called "Dr. Cloners Genetic Engineering Home Cloning Kits", as well as eletrophoresis apparatus, Caprine-Arthritis-Encephalitis-Virus, and caragheen. Involved in research on Mytilus edulis byssas fiber genetics to ultimately produce a building to replace lumber out of seawater.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct Sales
Sales through agents/distributors
License of technology
Joint venture (research)
Joint venture (marketing)

GENE-TRAK SYSTEMS

Address:	31 New York Avenue
	Framingham, MA 01701
Phone:	(508) 872-3113
Fax:	(508) 879-6462
Telex:	948654 INGN
Contact:	Mr. Patrick Connoy, President
Established:	1986
Employees:	133
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Food Processing

PRODUCTS/SERVICES/RESEARCH:
Nucleic Acid probe tests for detection of infectious pathogens (salmonella and listeria) in food products. Nucleic acid probe test for HIV-1 (Aids Virus) Research: development of non-isotopic probe-based tests for detection of pathogens in food and clinical samples (infectious diseases). Also developing instrumentation to automate DNA probe technology.

EXISTING BUSINESS RELATIONSHIPS:
Joint Venture between Integrated Genetics, Inc., and
Amoco Biotechnology USA

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

GENETICS INSTITUTE

Address:	87 Cambridge Park Drive
	Cambridge, MA 02140
Phone:	(617) 876-1170
Fax:	(617) 876-1504
Telex:	948219
Contact:	Mr. Tuan Ha-Ngoc, Sr. Vice President
Established:	1981
Employees:	400
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
tPA - tissue plasminogen activator; GM-CSF - granulocyte monocyte colony stimulating factor; EPO - erythropoietin; Factor VIII; Interleukin-3; M-CSF - macrophage colony stimulating factor; tPA (2nd generation); Factor VIII (2nd generation); cancer therapeutics; bone growth factors; other blood cell growth factors. Research in blood cell growth factors, coagulation and clot dissolution agents, bone growth factors and cancer therapeutics.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale
Joint Venture
Foreign Operation

GENTEST CORPORATION

Address:	6 Henshaw Street
	Woburn, MA 01801
Phone:	(617) 935-5115
Fax:	(617) 938-8644
Contact:	Charles L. Crespi, President
Established:	1983
Employees:	7

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry:
Systems for Drug Development/Safety Assessment

PRODUCTS/SERVICES/RESEARCH:
Research the development and characterization of cell lines containing specific capacities to metabolize drugs and environmental chemicals. Focus on in vitro models of human metabolism. Produces metabolically competent cell lines and Mutagenicity assays in metabolically competent cell lines.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct Sale
Sale through Agents/Distributors

GENZYME CORPORATION

Address:	75 Kneeland Street
	Boston, MA 02111
Phone:	(617) 451-1923
Fax:	(617) 451-2454
Telex:	25951282
Contact:	Mr. Henri Termer, President
Established:	1981
Employees:	258
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics
Specialty Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Lymphokines for cellular immunology testing (IL 1-6), Colony simulating factors and many growth factors. Enzyme and inhibitors for glycoconjugates. Glyoprotein remodelling technology. Therapeutic enzymes developed for use in enzyme replacement therapy. Diagnostic enzymes and substrates for reagent kits. Research: remodelling of therapeutic, biological active proteins using proprietary technology.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:
Pfizer (USA); Alcon (USA); Hoffman LaRoche (Switzerland); Kodak (USA); Technicon (Germany); Abbott (USA); Immunex

HOLOMETRIX, INC.

Address:	99 Erie Street
	Cambridge, MA 02139
Phone:	(617) 868-8050
Telex:	921483
Contact:	Dr. Judith Kitchell, Manager, Biomaterials
Established:	1986
Employees:	41 (6 - biotechnology)
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Therapeutics
Animal Health Care
Agriculture
Environmental Applications
Specialty Chemicals
Structural Protein Design
Biomaterials

PRODUCTS/SERVICES/RESEARCH:
Research in: Controlled release of active agents; wound dressing systems; repair materials for avulsive-type maxillofacial injuries; solid-waste disposal process development; biomass conversion to fuels and chemicals.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture (research)

HYGEIA SCIENCES

Address:	330 Nevada Street
	Newton, MA 02160
Phone:	(617) 964-0200
Contact:	Mr. Edward Covell, President
Established:	1980
Employees:	120
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics

PRODUCTS/SERVICES/RESEARCH:
Pregnancy test. Ovulation prediction test. Strep throat test. Gonorrhea test. Research: Development of diagnostic products utilizing both monoclonal and polyclonal antibodies for use by both physicians and consumers.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Tambrands, Inc. (New York) - Parent Company.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale

IMMUNOGEN, INC.

Address:	148 Sidney Street
	Cambridge, MA 02139
Phone:	(617) 661-9312
Fax:	(617) 661-9334
Contact:	Mr. Mitchel Sayare, President
Established:	1981
Employees:	30
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Therapeutics for: Non-Hodgkins lymphoma; Acute lymphoblastic leukemia; Acute granulocytic leukemia; Breast cancer; Colorectal cancer; Small cell lung cancer. Research: monoclonal antibody conjugates for the treatment of cancer and the development of highly specific drug delivery systems to attack specific cancer cells.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint-venture research

IMMUNOLOGIC PHARMACEUTICAL CORPORATION

Address:	One Kendall Square
	Building 600
	Cambridge, MA 02139
Phone:	(617) 494-0060
Fax:	(617) 494-1394
Contact:	Mr. Gustav Christiansen, President
Established:	1987
Employees:	23
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Research on the human immune system.

IMMUNOTECH CORPORATION

Address:	90 Windom Street
	Boston, MA 02134
Phone:	(617) 787-1010
Telex:	948179
Contact:	Mr. Francis Capitanio, President
Established:	1980
Employees:	26
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics

PRODUCTS/SERVICES/RESEARCH:
Enzyme immunoassay test kits for various thyroid, steroid and drug tests.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

IMREG, INC.

Address:	One Kendall Square
	Building 400
	Cambridge, MA 02139
Phone:	(617) 577-1066
Fax:	(617) 577-1198
Co·tact:	A. Arthur Gottlieb, President
Established:	1986
Employees:	40
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care-Diagnostics
Human Health Care-Therapeutics
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
Developing a group of patented biologics for treatment and diagnosis of diseases in which immune function is altered. These biologics including IMREG-1 and IMREG-2 and at least four other proprietary "immunomodulators", are derived from white blood cells of healthy individuals and appear to be important, previously uncharacterized regulators of the human immune system.

The IMREG immunomodulators are believed to have significant potential in the treatment and diagnosis of human diseases which are characterized by abnormal function of the immune system, such as AIDS and AIDS Related Complex (ARC), Rheumatoid Arthritis, Leprosy, several forms of cancer, Type I Diabetes Mellitus, and reactions to toxic plants such as poison ivy. The companys patented diagnostic technologies include two "immune function" diagnostics and a cancer diagnostic.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sales through agents/distributors, Joint venture (research), Joint venture (marketing)

INTEGRATED CHEMICAL SENSORS CORPORATION

Address:	44 Mechanic Street
	Newton, MA 02164
Phone:	(617) 965-6950
Contact:	Dr. Carl Good, President
Established:	1985
Employees:	10
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturers of biosensors which use monoclonal antibodies and measure environmental pollutants, drugs, hormones, chemical biological warfare agents and other substances.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Biotechnology Development Corp. (Mass.) - Parent Company

IONICS, INC.

Address:	65 Grove Street
	Watertown, MA 02172
Phone:	(617) 926-2500
Fax:	(617) 926-4304
Telex:	922473
Contact:	Mr. Arthur L. Goldstein, President and CEO
Established:	1948
Employees:	300
Ownership:	Public

MAIN ACTIVITIES:
Environmental Applications
Food Processing
Specialty Chemicals

PRODUCTS/SERVICES/RESEARCH:
Membrane systems for purification of biologically active fluids. Membranes for use in diagnostic and therapeutic applications. Research: development of membranes for separation and purification systems, including membranes for electrically driven and pressure driven processes.

KOCH PROCESS SYSTEMS, INC.

Address:	20 Walkup Drive
	Westborough, MA 01581
Phone:	(508) 366-9111
Fax:	(508) 870-5930
Telex:	200294
Contact:	W.J. McAuley, President
Established:	1966
Employees:	210
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturer of ultrafiltration membrane separation systems, biotech liquifiers and purification equipment.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Koch Engineering Systems (USA) - Parent Company

MACROCHEM CORPORATION

Address:	9 Linnell Circle
	Billerica, MA 01821
Phone:	(508) 670-5800
Fax:	(508) 670-5824
Telex:	501185
Contact:	Mr. George A. Stevens, President
Established:	1981
Employees:	17
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Therapeutics
Specialty Chemicals

PRODUCTS/SERVICES/RESEARCH:
Macrochem is currently conducting research in the following areas: TNLY drug to reduce prostate cancer growth, TNCA drug to reduce bone calcium loss, ANTILON drug for the better control of epilepsy, absorption enhancers for transdermal drug delivery (SEPA), Heparin absorbing filter, blood plasma volume expander (PY-RODEX), Fluoride-releasing dental composite (FLUOREVER).

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Phidea (Italy): joint-venture in marketing
Mitsubishi (Japan): joint-venture in marketing

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors, License of technology, Joint-venture (research), Joint-venture (marketing)

MATRITECH INC.

Address:	763 D Concord Avenue
	Cambridge, MA 02138
Phone:	(617) 661-6660
Contact:	Mr. Stephen D. Chubb, President
Established:	1987
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics

PRODUCTS/SERVICES/RESEARCH:
Antibodies to selected proteins of human cell nuclei for use in the detection of cancer.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

MEDISENSE, INC.

Address:	128 Sidney Street
	Cambridge, MA 02139
Phone:	(617) 492-2373
Fax:	(617) 576-6560
Contact:	Mr. Ron Zwanziger, President
Established:	1982
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Animal Health Care

PRODUCTS/SERVICES/RESEARCH:
Research and development of monoclonal antibodies, immunoassay, human diagnostics, polyclonal diagnostics, human diagnostic DNA, and veterinary DNA diagnostics.

MEMTEK CORPORATION

Address:	28 Cook Street
	Billerica, MA 01821
Phone:	(508) 667-2828
Fax:	(508) 667-1731
Telex:	4972809 METK
Contact:	S. Sternberg, Vice President
Established:	1979
Employees:	90
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics
Environmental Applications
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Development and production of bioactive membranes for affinity separations, bioproducts harvesting, therapeutic plasma treatment and diagnostics.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Joint-venture (research)
Joint-venture (marketing)

MICROFLUIDICS CORPORATION

Address:	44 Mechanic Street
	Newton, MA 02164
Phone:	(617) 965-7255
Telex:	755709
Contact:	Mr. David Halverson, President
Established:	1983
Employees:	16
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacturer of high-performance mixing, dispersion, and cell disruption equipment which produces lipsomes and emulsions.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Biotechnology Development Corp. (Mass.) - Parent Company

MILLIGEN

Address:	75 Wiggins Avenue
	Bedford, MA 01737
Phone:	(617) 275-5208
Contact:	Mr. Christopher Simmons, President
Established:	1986
Employees:	130
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Developer and manufacturer of instruments and chemicals for the synthesis and sequence analysis of DNA and proteins.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Millipore Corp. (Massachusetts) - Parent Company

MILLIPORE CORPORATION

Address:	Ashby Road
	Bedford, MA 01730
Phone:	(617) 275-9200
Fax:	(617) 875-2050
Telex:	443 0066 MILIPR-UI
Contact:	John Gilmartin, President and CEO
Established:	1954
Employees:	3100
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Wide range of life science tools, including new generation biomolecular,instrument and reagent systems for peptide and DNA synthesis and protein sequencing. HPLC instruments, chemistries and methodologies for isolating and purifying biomolecules, membrane devices and products for sample preparation, water purification, monoclonal antibody production and cell growth studies. Research: long range basic research in various separations technologies and products.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Waters Chromatography (Massachusetts)
Milligen (Massachusetts)

MOLECULON BIOTECH, INC.

Address:	230 Albany Street
	Cambridge, MA 02139
Phone:	(617) 577-9900
Contact:	Mr. Arthur Obermayer, President
Established:	1984
Employees:	50
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Develop and manufacture transdermal and controlled release drug delivery systems.

NEW ENGLAND BIOLABS, INC.

Address:	2 Tozer Road
	Beverly, MA 01915
Phone:	(508) 927-5054
Telex:	951057
Contact:	Mr. Donald G. Comb, President
Established:	1974
Employees:	32
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Restriction endonucleases; enzymes involved in nucleic acid, metabolism, ligases, methylases, exonucleases; DNA substrates; M13 DNA sequencing systems, oligonucleotides; linkers; custom synthesis.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:
Wako (Japan)
HCP Laboratories Ltd. (UK)
Gentross (Sweden)
N.E.Biolabs GmbH (Frankfurt) - West German Subsidiary

NOURSE FARMS, INC.

Address:	RFD PO Box 485
	South Deerfield, MA 01373
Phone:	(413) 665-2658
Contact:	Mr. Timothy Nourse, President
Established:	1969
Employees:	25
Ownership:	Private

MAIN ACTIVITIES:
Agriculture

PRODUCTS/SERVICES/RESEARCH:
Virus testing and tissue-culture production.

REPLIGEN CORPORATION

Address:	One Kendall Square Building 700 Cambridge, MA 02139
Phone:	(617) 225-6000
Fax:	(617) 494-1786
Telex:	881987
Contact:	Mr. Sanford D. Smith, President
Established:	1981
Employees:	75
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics, Human Health Care - Therapeutics
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Extracorporeal plasma filtration device for treatment of cancer and autoimmune diseases; based on rProtien A(tm); rDNA 120 antigenic fragments for AIRS diagnosis; AIDS vaccine; rDNA protein for AIDS vaccine; lignin-degrading and modifying enzymes for pulp processing and Bacillus thuringiensis for insect control; food biotechnology. Primary research efforts on AIDS vaccine and therapeutic development.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements: Tiedemanns (Scandinavia); Sandoz (Switzerland) - Joint Venture Research

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale, License of technology, Joint-venture (research)

ROHM TECH, INC.

Address:	195 Canal Street
	Malden, MA 02148
Phone:	(617) 321-6984
Fax:	(617) 322-0358
Telex:	200721 ROHM UR
Contact:	Mr. Ekkehard Grampp, President
Established:	1986
Employees:	80
Ownership:	Private

MAIN ACTIVITIES:
Agriculture
Food Processing
Specialty Chemicals

PRODUCTS/SERVICES/RESEARCH:
Enzymes for food processing with technical service back-up.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Rohm GmbH (Germany) - Parent Company

ROMICON, INC.

Address:	100 Cummings Park
	Woburn, MA 01801
Phone:	(617) 935-7840
Fax:	(617) 935-7183
Telex:	949333
Contact:	Mr. Robert A. Cross, President
Established:	1972
Employees:	115
Ownership:	Public

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Ultrafiltration membranes, microfiltration membranes, chromatography media and columns, complete systems for separation and purification. Research: Product development of membranes for separation and purification of bioproteins, cells, cell debris, enzymes and other biological products. Applications research to develop process flow sheets for biotechnology and pharmaceutical companies.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Rohn & Haas Company (USA) - Parent Company

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors

SAFER, INC.

Address:	189 Wells Avenue
	Newton, MA 02159
Phone:	(617) 964-2990
Fax:	(617) 235-6237
Telex:	5106003840
Contact:	Mr. Milton Wilkins, President
Established:	1978
Employees:	50
Ownership:	Private

MAIN ACTIVITIES:
Agriculture

PRODUCTS/SERVICES/RESEARCH:
Research: development of biologically based pesticides and plant care products based upon fatty acid, plant oil and microbial (both naturally occurring and genetically engineered) sciences.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Safer, Ltd. (Ontario, Canada) - wholly owned subsidiary

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Direct sale

SANALINE

Address:	19 Union Street
	Scituate, MA 02066
Phone:	(617) 545-3060
Contact:	Richard H. Powderly, President
Established:	1975
Employees:	15
Ownership:	Private

MAIN ACTIVITIES:
Environmental Applications
Food Processing
Speciality Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Manufacture and market a comprehensive line of microbiological testing products used in testing water, soft drinks, beer, wines, and other liquids where enumeration and indentification of microorganisms is of importance.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sales through agents/distributors

SERAGEN, INC.

Address:	97 South Street
	Hopkinton, MA 01742
Phone:	(508) 460-0412
Contact:	Mr. Karl Ahrendt, President
Established:	1979
Employees:	70
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
RIA kits and supporting reagents for prostaglandins, throm- boxane, leukotrienes and HETEs. Research on hybrid protein molecules that home in on specific types of cancer cells and on the immune cells responsible for rejecting organ transplants.

SERONO DIAGNOSTICS, INC.

Address:	100 Longwater Circle
	Norwell, MA 02061
Phone:	(617) 871-3962
Fax:	(617) 871-6766
Telex:	951878
Contact:	Mr. Hersh Petrocelly, President
Established:	1969
Employees:	100
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics

PRODUCTS/SERVICES/RESEARCH:
U.S. marketing and distribution of diagnostics products manufactured by Ares Serono Group Companies throughout the World.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Ares Serono N.V. (Switzerland) - Parent Company

SOMATIX, INC.

Address:	One Kendall Square
	Cambridge, MA 02139
Phone:	(617) 225-6000
Fax:	(617) 494-1786
Contact:	Mr. Gordon Kingsley, President
Established:	1988
Employees:	6
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Research in somatic cell therapy using retrovial vectors for gene transfer into somatic cells.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology

T CELL SCIENCES, INC.

Address:	38 Sidney Street
	Cambridge, MA 02139
Phone:	(617) 868-2280
Fax:	(617) 868-2382
Telex:	9102401560 TCEL CAM
Contact:	Mr. James Grant, CEO
Established:	1984
Employees:	66
Ownership:	Public

MAIN ACTIVITIES:
Human Health Care - Diagnostics
Human Health Care - Therapeutics

PRODUCTS/SERVICES/RESEARCH:
Developing diagnostic and therapeutic products for the detection, monitoring and treatment of immune system disorders, including: autoimmune diseases and infectious diseases and certain cancers.

EXISTING BUSINESS RELATIONSHIPS:
Cooperative Agreements:
Pfizer (USA)
Yamanouchi (Japan)

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
Sale through agents/distributors
License of technology
Joint-venture (marketing)

TRANSGENIC SCIENCES, INC.

Address:	365 Plantation Street
	Worcester, MA 01605
Phone:	(508) 752-4442
Contact:	Mr. James P. Sherblom, President
Established:	1987
Employees:	8
Ownership:	Private

MAIN ACTIVITIES:
Human Health Care - Therapeutics
Agriculture
Disease Model Systems Based on Transgenic Animals

PRODUCTS/SERVICES/RESEARCH:
Research and development of products in the area of transgenic animal and human gene therapy.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PURSUING:
License of technology
Joint venture (research)
Equity investment

TROPIX

Address:	47 Wiggins Avenue
	Bedford, MA 01730
Phone:	(617) 271-0045
Fax:	(617) 275-8581
Contact:	Particia McGrath, President
Established:	1986
Employees:	10
Ownership:	Private

MAIN ACTIVITIES:
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Development of luminescent molecules and enhancers for detecting substances in chemical and biological samples. Marketing of analytical test kits, specialized photosensitive film, photon detecting instruments for several bioanalytical applications.

FORMS OF INTERNATIONAL COOPERATION THIS COMPANY IS INTERESTED IN PUSUING:
Direct Sale
Sale through agents/distributors
License of technology
Joint Venture (marketing)

WATERS CHROMATOGRAPHY DIVISION MILIPORE CORP.

Address:	34 Maple Street
	Milford, MA 01757
Phone:	(508) 478-2000
Fax:	(508) 872-1990
Telex:	174166
Contact:	Mr. Chane Graziano, President
Established:	1962
Employees:	1075
Ownership:	Public

MAIN ACTIVITIES:
Specialty Chemicals
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
High performance liquid chromatography (HPHC) instruments and chemicals. Research: development of instruments, chemicals,, and methodologies for: protein purification and characterization, amino acid analysis, DNA isolation and analysis, neurotransmitter analysis, characterization of complex carbohydrates from glycoproteins.

EXISTING BUSINESS RELATIONSHIPS:
Subsidiary Relationships:
Milipore Corp. (USA) - Parent Company

ZYMARK CORPORATION

Address:	Zymark Center
	Hopkinton, MA 01748
Phone:	(508) 435-9501
Fax:	(508) 626-8652
Contact:	Mr. Francis Zenie, President
Established:	1981
Employees:	150
Ownership:	Private

MAIN ACTIVITIES:
Environmental Applications
Suppliers to the Biotechnology Industry

PRODUCTS/SERVICES/RESEARCH:
Laboratory robotic systems and accessories for chemistry and biotechnology. Systems support and training.

CONSULTANTS TO THE BIOTECHNOLOGY INDUSTRY

BOSTON BIOMEDICAL CONSULTANTS

Address:	100 Fifth Avenue Waltham, MA 02154
Phone:	(617) 890-5060
Fax:	(617) 890-6746
Telex:	5106018023
Contact:	Henry Wellurt, President
Established:	1977

SERVICES PROVIDED:
Management consulting, technology and marketing assessment, research portfolio analysis, and technology sourcing.

CAMBRIDGE LABORATORY CONSULTANTS, INC.

Address:	53 Beaver Road Weston, MA 02193
Phone:	(617) 235-8726
Contact:	Dr. Donald J. Ciappenelli, Chairman
Established:	1981

SERVICES PROVIDED:
Consultants to chemical and biotechnology industry on science planning, strategic management and regulatory affairs.

COMMONWEALTH BIOVENTURES INC. (CBI)

Address:	Two Biotech Park 373 Plantation Street Worcester, MA 01605
Phone:	(508) 797-6500
Contact:	Mr. Robert G. Foster, President
Established:	1987

SERVICES PROVIDED:
The mission of Commonwealth Bioventures Inc. (CBI) is to identify for seed investment the highest quality biotechnology start-ups and then to nurture and guide these investments through important milestones to create company value and to insure future financing.

CONSULTING RESOURCES CORPORATION

Address:	Six Northbrook Park Lexington, MA 02173
Phone:	(617) 863-1222
Fax:	(617) 863-1081
Telex:	127097
Contact:	Roger E. Shamel, President
Established:	1981

SERVICES PROVIDED:
Management consulting services for biotechnology industry. Areas of biotechnology expertise include pharmaceuticals, agriculture, chemicals, food and pollution control.

EG&G MASON RESEARCH INSTITUTE

Address:	57 Union Street Worcester, MA 01680
Phone:	(508) 791-0931
Fax:	(508) 753-1834
Contact:	Steven M. Niemi, DVM

SERVICES PROVIDED:
Toxicologic evaluation of drugs, environmental pollutants and other agents.

MEMORIAL DRIVE CONSULTANTS, INC.

Address:	University Place, Suite 183 124 Mount Auburn Street Cambridge, MA 02138
Phone:	(617) 547-3600
Fax:	(617) 547-2236
Contact:	William J. Byrd, President

SERVICES PROVIDED:
Advisory services in the pharmaceutical, biomedical and life sciences areas. MDCI works at the interface of technology and business, providing objective analysis of scientific and regulatory issues to assist clients in formulating sound business decisions.

PETER FEINSTEIN, INC.

Address:	One Kendall Square Building 400 Cambridge, MA 02139
Phone:	(617) 577-8110
Fax:	(617) 577-8985
Contact:	Peter Feinstein, President

SERVICES PROVIDED:
A wide range of communications services to biomedical companies including press and investor relations, and business-to-business communications.

PLANT RESOURCES VENTURE FUNDS

Address:	124 Mount Auburn Street, Suite 310 Cambridge, MA 02138
Phone:	(617) 492-3900
Fax:	(617) 492-3940
Telex:	704508 PRVF BNS UD
Contact:	John R. Hesse, Managing General Partner
Established:	1981

SERVICES PROVIDED:
Provides equity capital for new and growing biological science companies. General focus area: companies benefiting from developments in biotechnological sciences in agriculture, food, waste treatment, and human and animal health care. Particular focus area: genetic improvement of seeds, plants and animal reproduction technologies, biological control of pests, diagnostics, chemicals derived from plants, microbes and marine organisms, new raw materials for producing foods and flavorings.

QUINTILES, INC.

Address:	One Kendall Square Building 100 Cambridge, MA 02139
Phone:	(617) 225-0010
Fax:	(617) 225-0013
Contact:	Dennis B. Gillings, President
Established:	1988

SERVICES PROVIDED:
Works with biotechnology firms seeking FDA approval for health care products. Focus areas: study design and regulatory affairs and provides data processing and statistical analysis services.

STONE & WEBSTER ENGINEERING CORPORATION

Address:	245 Summer Street P.O. Box 2325 Boston, MA 02107
Phone:	(617) 589-2506
Fax:	(617) 589-2156/8071
Telex:	94-0001
Contact:	John A. Erlewine, Vice President International Operations
Established:	1889

SERVICES PROVIDED:
Developing advanced systems for improving data collection, analysis and reporting techniques for human clinical research with experimental drugs. These systems should be able to reduce the time necessary for completion of human clinical studies by about one year. This reduction in time, and therefore money, will more than pay for the installation of the advanced, real-time, distributed data collection system. In addition, Stone & Webster has designed and built several biotechnology research facilitites, the latest of which is for a diversified Japanease conglomerate which is entering the United States market for diagnostic products.

WESTON BIOTECHNOLOGY GROUP, INC.

Address:	P.O. Box 434 Weston, MA 02193
Phone:	(508) 899-3113
Contact:	Dr. Nigel L. Webb, President
Established:	1986

SERVICES PROVIDED:
Consulting to young biotechnology companies seeking to expand, and to health-care companies wishing to invest overseas.

PRODUCT INDEX

AGRICULTURE
ANIMAL HEALTH CARE
ENVIRONMENTAL APPLICATIONS
FOOD PROCESSING
HUMAN HEALTH CARE-DIAGNOSTICS
HUMAN HEALTH CARE-THERAPEUTICS
SPECIALITY CHEMICALS
SUPPLIERS TO THE BIOTECHNOLOGY INDUSTRY

AGRICULTURE

Biotechnica International, Inc. 14
Holometrix, Inc. 42
Nourse Farms, Inc. 60
Rohm Tech, Inc. 62
Safer, Inc. 64
Transgenic Sciences, Inc. 70

ANIMAL HEALTH CARE

Angenics, Inc. 6
Applied Biotechnology 7
Biogen N.V. 11
Cambridge Bioscience 18
Cambridge Medical Technology 19
Damon Biotech, Inc. 31
Holometrix, Inc. 42
Imreg, Inc. 47
Medisense, Inc. 53

ENVIRONMENTAL APPLICATIONS

Cambridge Analytical Associates, Inc. 17
Crystal Diagnostics, Inc. 30
Genemsco Corporation 37
Holometrix, Inc. 42
Ionics, Inc. 49
Memtek Corporation 54
Sanaline 65
Zymark Corporation 73

FOOD PROCESSING

Applied Biotechnology 7
Enzytech, Inc. 35
Gene-Trak Systems 38
Ionics, Inc. 49
Rohm Tech, Inc. 62
Sanaline 65

HUMAN HEALTH CARE - DIAGNOSTICS

Advanced Magnetics, Inc.	2
Angenics, Inc.	6
Biogen N.V.	11
Biomedical Technologies, Inc.	12
Biotechnica International, Inc.	14
Boston Biomedical, Inc.	16
Cambridge Bioscience	18
Cambridge Medical Technology	19
Cambridge Research Laboratory	21
Cellcor Therapies, Inc.	23
Charles River Biotechnical Services	24
ChemGenes Corporation	26
Collaborative Research, Inc.	27
Crystal Diagnostics, Inc.	30
Damon Biotech, Inc.	31
Endogen, Inc.	33
Gene-Trak Systems	38
Genzyme Corporation	41
Hygeia Sciences	43
Immunologic Pharmaceutical Corporation	45
Immunotech Corporation	46
Imreg, Inc.	47
Matritech, Inc.	52
Medisense, Inc.	53
Memtek Corporation	54
Repligen Corporation	61
Seragen, Inc.	66
Serono Diagnostics, Inc.	67
T Cell Sciences, Inc.	69

HUMAN HEALTH CARE-THERAPEUTICS

Alkermes, Inc.	3
Applied Biotechnology	7
Biogen N.V.	11
Biopure Corporation	13
Cambridge Bioscience	18
Cambridge Neuroscience Research, Inc.	20
Charles River Biotechnical Services	24
Collaborative Research, Inc.	27
Damon Biotech, Inc.	31
Endogen, Inc.	33

HUMAN HEALTH CARE-THERAPEUTICS (CONTINUED)

Genetics Institute	39
Genzyme Corporation	41
Holometrix, Inc.	42
Immunogen, Inc.	44
Immunologic Pharmaceutical Corporation	45
Imreg, Inc.	47
Macrochem Corporation	51
Memtek Corporation	54
Moleculon Biotech, Inc.	58
Repligen Corporation	61
Seragen Inc.	66
Somatix, Inc.	68
T Cell Sciences, Inc.	69
Transgenic Sciences, Inc.	70

SPECIALITY CHEMICALS

Biomedical Technologies, Inc.	12
Biotechnica International, Inc.	14
ChemDesign Corporation	25
Collaborative Research, Inc.	27
Damon Biotech, Inc.	31
Endogen, Inc.	33
Enzytech, Inc.	35
Genzyme Corporation	41
Holometrix, Inc.	42
Ionics, Inc.	49
Macrochem Corporation	51
Rohm Tech, Inc.	62
Sanaline	65
Waters Chromatography Division, Millipore Corp.	72

SUPPLIERS TO THE BIOTECHNOLOGY INDUSTRY

A/G Technology Corporation	1
Advanced Magnetics, Inc.	2
American Biotechnologies	4
Amicon Division (W.R. Grace & Co.)	5
APV Gaulin, Inc.	8
Aspen Technology, Inc.	9
Betagen Corporation	10
Biomedical Technologies, Inc.	12
Biotechnology Development Corporation	15
Boston Biomedical, Inc.	16
Cambridge Technology, Inc.	22
ChemDesign Corporation	25
ChemGenes Corporation	26
Collaborative Research, Inc.	27
Covalent Associates, Inc.	28
Creative Biomolecules	29
Dan Kar Corporation	32
Endogen, Inc.	33
Enzyme Center, Inc.	34
Filtron Technology Corporation	36
Genemsco Corporation	37
Gentest Corporation	40
Genzyme Corporation	41
Integrated Chemical Sensors Corporation	48
Koch Process Systems, Inc.	50
Memtek Corporation	54
Microfluidics Corporation	55
Milligen	56
Millipore	57
New England Biolabs, Inc.	59
Repligen Corporation	61
Romicon, Inc.	63
Sanaline	65
Tropix	71
Waters Chromatography Division, Millipore Corp.	72
Zymark Corporation	73

REQUEST FOR ADDITIONAL COPIES

If you would like additional copies of the Massachusetts International Biotechnology Directory, please send a check for $25.00 per copy (for the directory and postage) to:

MASSACHUSETTS INTERNATIONAL TRADE COUNCIL, INC.
100 CAMBRIDGE STREET, SUITE 902
BOSTON, MA 02202
ATTN: BIOTECHNOLOGY DIRECTORY

Please send me ____ copies of the Massachusetts International Biotechnology Directory at a cost of $25.00 per copy (postage included).

Enclosed please find a check in the amount of $_____.

Send the Directory to: _____

Name of firm: _____

Address: _____

_____

Attention: _____

Please make check payable to:

Massachusetts International Trade Council, Inc.